WHAT IS CLAIMED IS:

1. A radial winding stator structure for a single phase motor, the radial winding stator structure being composed of a plurality of silicon steel sheets that are stacked together, each of the silicon steel sheets comprising:

a hub; and

a plurality of poles numbering six or eight, each of which being radially extended from a circumference of the hub to form a radially extended portion, and tangentially expanded at a terminal of the radially extended portion to form a tangentially extended portion;

wherein the hub and the poles are one-piecemade, the radially extended portions of each of the poles are stacked to form a pole bobbin of the radial winding stator structure, the tangentially extended portions of each of the poles are stacked to form a pole surface of the radial winding stator structure, and an electrically conductive wire is wound around all of the pole bobbins.

2. The radial winding stator structure according to claim 1, wherein the pole surface is a camber.

3. The radial winding stator structure according to claim 1, wherein the hub is formed with a through hole at a center thereof.

4. The radial winding stator structure according to claim 2, wherein a ratio of an arc length of the pole surface to an axial height of the pole surface substantially ranges from 0.8 to 2.

5. A radial winding stator structure for a fan motor, the radial winding stator structure being composed of a plurality of silicon steel sheets that are aligned and stacked together, the stator structure comprising:

a hub; and

a plurality of pole units numbering six or eight located on a circumference of the hub,

each of the pole units comprising a pole bobbin radially extended from the hub and a pole surface tangentially expanded from a terminal of the pole bobbin;

wherein an electrically conductive wire is wound around the pole bobbins of the pole units, and a ratio of an arc length of the pole surface to an axial height substantially ranges from 0.8 to 2.